

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
11 August 2005 (11.08.2005)

PCT

(10) International Publication Number  
**WO 2005/073368 A1**

- (51) International Patent Classification<sup>7</sup>: C12N 9/24, 9/30, 15/56, 15/63, 9/00
- (21) International Application Number: PCT/KR2005/000234
- (22) International Filing Date: 27 January 2005 (27.01.2005)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
10-2004-0006185 30 January 2004 (30.01.2004) KR
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135-971 (KR).
- (81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,  
ZW.
- (84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,  
SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,  
GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:  
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: PROTEIN WITH ACTIVITY OF HYDROLYZING DEXTRAN, STARCH, MUTAN, INULIN AND LEVAN, GENE ENCODING THE SAME, CELL EXPRESSING THE SAME, AND PRODUCTION METHOD THEREOF

(57) Abstract: Disclosed is an enzyme, having the amino acid sequence of SEQ. ID. No. 1 with the activity of hydrolyzing dex-  
tran, starch, mutan, inulin and levan, a gene encoding the enzyme, and a transformed cell expressing the gene. Also disclosed is  
a method of producing an enzyme capable of degrading dextran, starch, mutan, inulin and levan, which comprises culturing the  
cell, expressing the enzyme in the cell and purifying the enzyme. A composition comprising the enzyme is provided for removing  
dextran or polysaccharide contaminants during sugar production. With such degradation activity, the enzyme not only finds various  
applications in the dental care industry, including anti-plaque compositions and mouthwashes, but is also useful in removing dextran  
or polysaccharide contaminants during sugar production.

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